

## AP Biology Lab Report Components

### Lab Component 1 – Titles

Lab report titles need to precisely describe the purpose of the lab and include pertinent names of specimens or data used. After the title the next line should be the author's name, dates of the lab and facility completed at.

### Lab Component 2 – Abstract

The abstract is a general summary of the question, results & analysis of the lab. This is seen as a short 1-2 paragraph before the formal introduction.

### Lab Component 3 – Introduction

The introduction provides at least 2 points of background information about your topic, discusses the question the experiment will investigate & states the null hypothesis that will answer the question.

### Lab Component 4 – Materials & Methods

The methods must be in paragraph format, describing the steps taken to complete the experiment and materials used in those steps. There must always be a description of what the experimental controls were: things were kept controlled so they would not influence the experimental results. Lastly, describe any baseline/control/placebo groups: Trial(s) used to establish what the results are under normal conditions.

### Lab Component 5 – Results & Analysis

The results show data tables numbered in order with proper titles & units; figures labeled in order with proper titles, axes & units. All figures should also have a summary of what the trends are. The analysis should use some statistical measure to discuss why the null hypothesis is accepted or rejected. Appropriate statistical methods include: t-test, figure error bars and/or chi-square test. Finally, you must discuss why your hypothesis decision makes sense or not and discuss what can be done in the future to improve the results of this experiment or (if results were good), what a beneficial extension could be that might make it even better or useful to similar future studies.